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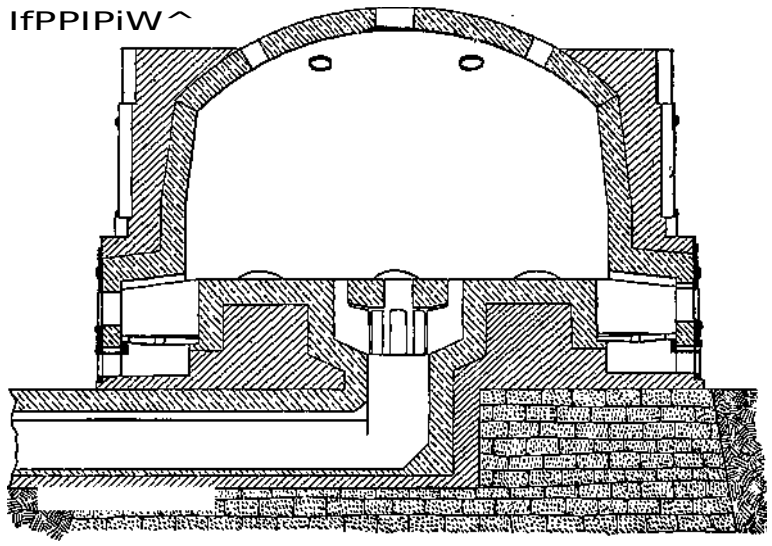
flame and the cooler gases with which they come in contact.

Immediately below the roof of the kiln the hot gases are relatively at rest. The burning of bricks does not permit of sudden or quick changes of temperature, as bricks will crack and spawl if subjected to such changes; therefore it would not be advantageous to use a kiln which worked in this manner.

By still further obstructing the smoke hole of the kiln, the lower surface of the layer of hot gases can be driven downward



FIG, 3.

until it comes into contact with the sole of the kiln, thus giving the maximum efficiency which is possible with kilns working on the updraft system. Under these conditions, the brick can be burned to an extent which is fairly satisfactory, but they will not be of extra good quality, because, in spite of all, the currents of hot gases have a tendency to flow directly to the highest opening.

The equalization of the temperature will be affected very little by the eddy currents which will be formed. These eddy currents will be of very slight intensity when the hot gases in the kiln are as shown in Fig. 1, but nevertheless they do not disappear entirely